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MCAS EL TORO
SSIC #5090.3

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Mr. Dean Gould
BRAC Environmental Coordinator
Marine Corps Air Station El Toro
Base Realignment and Closure
P.O. Box 51718
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DRAFT WORK PLAN, PRELIMINARY ASSESSMENT, BUILDING 307, MARINE CORPS AIR STATION (MCAS) EL TORO

Dear Mr. Gould:

The Department of Toxic Substances Control (DTSC) reviewed the subject Work Plan that was received by this office on May 22, 2001. The Work Plan describes the objectives and procedures to conduct a Preliminary Assessment in and around Building 307 at MCAS El Toro. Building 307 is located within Installation Restoration Program Site 24, the Volatile Organic Compound (VOC) Source Area. The purpose of the Work Plan is to identify and characterize the possible presence of tetrachloroethene (also referenced as perchlorothylene or PCE) in the environment as a result of laundry and dry cleaning operations at Building 307.

After review of the Work Plan, DTSC has the following comments:

1. Section 2, Site Background and Setting: This section should be augmented to include available information and associated references regarding activities conducted on site so that potential release mechanisms or disposal areas are clearly identified in the text. In turn, the sampling design should correlate to these areas. This information should include, but not be limited to, the following items:

    - Chemicals used on site. Based on the period of operation, other chemicals may have been used for dry cleaning activities. For example, carbon tetrachloride was widely used until the 1950s and trichloroethene (TCE) was introduced in the 1930s. Then, use of PCE increased in the 1940s and by the late 1950s, it virtually replaced carbon tetrachloride and TCE.

- Form of chemical used. For example, please specify if concentrated liquid product or dilute liquid mixtures, etc. were used.
- Process descriptions and equipment configuration. For example, please specify if the channels identified in Building 307 were unlined or lined with concrete or another material.
- Wastewater, residue, and excess product disposal and cleaning methods. For example, spills may have been washed down floor drains or disposed of outside the building.

2. Section 2.3, Previous Work: The second paragraph provides information from groundwater well 12UGMW31 that is "located on the southeast side and upgradient of Building 307."

   Based on the estimated gradient shown on Figure 2-1 - Site Plan, groundwater well 12UGMW31 appears to be located cross-gradient of Building 307. Please clarify this in the text. Also, please provide information regarding downgradient wells located in close proximity to Building 307. If there are none, please state as such in the text.

3. Section 3.1.3, Decision Inputs: Decision input number 2 states, "Decision threshold values for the target analytes (that is, PCE, trichloroethene [TCE], and 1,1-dichloroethene [1,1-DCE]) in the soil gas were established in the *Draft Final Interim Record of Decision (ROD) for Operable Unit (OU) 2A - Site 24 VOC Source Area, Vadose Zone* (BNI [Bechtel National, Inc.] 1997b). These values, which are protective of the groundwater at maximum contaminant levels (MCLs), are 69 micrograms per liter (µg/L), 27 µg/L, and 563 µg/L, respectively."

   Threshold levels for Site 24 were established specifically for the conditions at that site. As a result, the threshold values calculated for Site 24 may not be applicable for potential releases from Building 307. Please provide appropriate screening levels to be used for this preliminary assessment and justification for their use.

4. Section 3.1.5, Decision Rules: According to the decision rules, deeper soil gas samples (at depths greater than 15 feet below ground surface (bgs)) will only be collected and analyzed if chemicals of potential concern (COPCs) are detected in shallow samples (at depths between 0 and 15 feet bgs).

   Considering the time frame for site activities (1944 through 1977), a release could have migrated deeper than 15 feet bgs. As a result, sampling only shallow soils may not be adequate to locate potential releases that may have migrated deeper. Please address this in the sampling design.

Please include the approximate depth of the sanitary sewer pipeline and verify in the text that samples will be collected just below the bottom of the sanitary sewer pipeline. Additionally, if available, please provide information regarding the construction and condition of the sanitary sewer system (e.g. sealed joints, lined or unlined pipes, perforated pipes, etc.).

5. Section 3.1.7, Sampling Design: According to this section, a grid-sampling approach will be applied within the building where laundry and dry cleaning activities were performed. Additionally, Plate 1 indicates that one sample will be collected within each of the grids.

   Please specify the approximate grid size in the text.

   Plate 1 shows that each grid contains several different features that may be release locations (e.g. channels and floor drains). Therefore, the sampling design plan should include additional sampling locations to investigate multiple potential release features within a grid and to target cracks in the concrete floor.

   Additionally, DTSC recommends inspection of any manholes, manways or cleanouts associated with the discharge and sanitary sewer pipelines. For example, MH-201-2A and MH-201-2 are shown on Plate 1. Further, samples of any sediment or liquid, if present, should be collected an analyzed for target compounds.

6. Section 3.1.7, Sampling Design: DTSC recommends collection of soil matrix samples directly adjacent to soil gas samples at a few locations to evaluate possible correlations between the soil matrix and soil gas sample results. The soil matrix samples should be collected at the same depths as the soil gas samples.

7. Section 5.2.3, Quality Control Requirements: Please provide reporting limits for all analytes for both United State Environmental Protection Agency (EPA) Methods 8021B and TO-14 used to analyzed soil gas samples.

8. Table 5-2, Project Quality Control Criteria for Soil Gas Samples: According to the notes to the table, the project decision thresholds were established in the *Draft Final Interim ROD for OU 2A - Site 24 VOC Source Area, Vadose Zone*.

   Please refer to Comment Number 3 above.

9. Table 5-2, Project Quality Control Criteria for Soil Gas Samples: The reporting limit required is specified as 10 µg/L for PCE, TCE and 1,1,-DCE.

   Detection limits for target compounds should not exceed 1 µg/L. Further, detection limits should be lower than associated screening levels. Please refer to Comment Number 3 above as related to identification of screening levels.

10. Plate 1, Proposed Sampling Locations: The scale of the drawing, identified as one-inch is equal to 50-feet, does not appear to be correct. Based on the scale shown, the approximate distance between sampling locations along the sanitary sewer would be approximately 85 feet. According to information provided by Department of the Navy contractors at the May 30, 2001 Restoration Advisory Board meeting, the approximate distance between sampling locations should be 50 feet. Please verify the scale and revise the drawing accordingly.

11. Plate 1, Proposed Sampling Locations: Please include a sample location adjacent to the first joint In the sanitary sewer pipeline outside of the northwest side of Building 307.

Please contact me at (714) 484-5395 if you have any questions.

Sincerely,

Triss M. Chesney

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